## SUMMARY OF MASTER'S DISSERTATION

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Title

System Design of Mutual-Help Collective Housings in A Declining Birthrate Society

## Abstract

In Japanese aging society, the female employment is inevitable to ensure the workforce and maintain the social security system. However, childbirth and child care often counteract women to work. Also that accelerates Japanese declining birthrate. Therefore, it is important to create social environment good to work for women who have a small child.

For this problem, government set a national goal "socialization of child-rearing". This aim is that community assumes a role of parenting which it has been thought that mothers or families should assume ever. However, in current system it does not work because community cannot support the rearing in their everyday life due to rarefaction of community. As one of solutions for this issue it became to receive attentions to parent children by the community-dwelling in community typed collective housings. However it has not spread in Japan yet.

Therefore, the large purpose in this paper is to build a collective housing system which contributes "socialization of child-rearing". To assist that, I examined the issues of community typed collective housings and the needs of working mothers who have a small child and made the conceptual design. In particular, first I extracted the system requirements based on interview and literature data of the stakeholders of the existing community typed collective housings in Japan and Netherlands and also working mothers and providers of existing community support projects. From these system requirements, I made functional design and physical design and built a concept for a collective housing system which contributes "socialization of child-rearing".

The proposed system is a collective housing which has private dwelling units with a kitchen, living and dining room and bath room for dwellers, and a common space with a kitchen, living and dining room. In common space, the dwellers including working mothers and their children can communicate to the others, and also they can receive dinner, child care and so on. Due to this system, it is expected working mothers can make child-rearing along with the residents in the community.

For system verification, I made an assessment of the business profitability as lease property business according to estimation of the fund balances of 6 business models. As the result, it is found that it is possible to collect funds in 25 years which is one of indications for the business profitability in the following 3 models; 1)a collective housing model using own ground and a renovated own building, 2)a collective housing model added a serviced elderly housing using own ground and a renovated own building,3) a collective housing model added a serviced elderly housing using own ground.

In addition, for system validation, I made non-structured interviews to working mothers who have small children. It shows that the proposed system satisfies their needs and also they think it is good for their children. However, it is also shown that the system needs to involve nursing sick children and children. They remain as main issues in this paper.

## Key Word(5 words)

Aging society, The rate of female employment, , Child-rearing, Community, Collective housing